

REMARKS

In the Office Action, the Examiner has acknowledged the applicant's claim of foreign priority based upon China Application No. 00129863.1. A certified copy of the Chinese application is submitted herewith as required by the Examiner.

DRAWINGS

The Examiner has also acknowledged the acceptance of the drawings received July 26, 2004.

The Examiner further objected to Claim 49 due to informalities, and appropriate correction has been made in the amendments herein.

CLAIM REJECTIONS

35 USC §112

The Examiner rejected Claims 47 and 48 as being indefinite, stating that the limitation "independently" contradicts the limitations relating to matching to the slope of the central and at least one peripheral zone. In this regard, the term "independently" has been deleted from this claim to alleviate this issue. It is therefore believed that the claim as now presented is in compliance with 35 USC §112 accordingly.

35 USC §102

The Examiner rejected Claims 25 and 27 under 35 USC §102(b) as being anticipated by Siviglia. With reference to Claim 25, the Examiner states that Siviglia discloses a contact lens having a central zone 20, a posterior surface with a curvature, a connecting zone, with reference to an elbow region between central zone 20 and peripheral zone 22. The Examiner further refers to Fig. 2, where it is stated that the zone is located at the line between zones 20 and 22. The Examiner further states that Siviglia discloses a peripheral zone formed as a truncated conoid, and that the lens is designed to impart desired forces to a cornea to alter the shape of the cornea in a predetermined manner, with reference to column 7, lines 16-20 and column 1, lines 38-42. The rejection of Claim

25 is respectfully traversed, in that Claim 25 as now amended clearly distinguishes from the prior art of Siviglia. As previously noted, the prior art of Siviglia in now way relates to reshaping the cornea, in accordance with the claimed invention as now presented. In Claim 25, the invention is defined as a corneal refractive therapeutic contact lens for selectively altering the curvature of a patient's normal cornea, which comprises a central, connecting and at least one peripheral zone which together provide a contact lens design which will alter the shape of the normal cornea by redistribution of corneal tissue. The invention is further defined as having the peripheral zone formed to be at least initially spaced from the cornea, which has no correlation within the prior art of Siviglia or any other prior art.

In a review of the prior art of Siviglia, the entire Background of the Invention refers to surgical procedures including radial keratotomy, penetrating keratoplasty or corrective surgery for Fuchs corneal dystrophy. In each of these surgical techniques, the patient's cornea will have a surgically flattened central surface, which Siviglia notes cannot be well fit with prior art corrective contact lenses. The contact lens design as described thereby thus relates to a corrective contact lens which may be used by a patient suffering from corneal instability following radial keratotomy, for correction of visual defects which were not corrected by the surgical technique. Thus, as described in column 2, lines 21-34, the Siviglia lens can be worn by a patient suffering from corneal instability following radial keratotomy, or worn by the radial keratotomy patient who seeks to improve their appearance by wearing contact lenses rather than eye glasses to correct a stigmatism or the like, which are uncorrected by the surgical procedure. The lens described by Siviglia does not relate to a corneal refractive therapeutic lens wherein a normal cornea has its shape altered by a lens design for redistribution of corneal tissue, and corresponding correction of refractive errors. Further, with reference to the at least one peripheral zone according to the present invention, the lens of Siviglia does not in any way teach or make obvious the aspect of providing the peripheral zone to be at least initially spaced from the cornea. As discussed in column 5, lines 18 thru 22, the lens of Siviglia has an annular portion formed as a conical surface, which approximates the curvature of the confronting normally spherical curvature of the cornea. Alternatively, the posterior zone 22 is formed from a series of concentric annular portions of a conical surface characterized by a different cone angle (see column 2, lines 28-33), to closely approximate the spherical corneal surface. Nothing within Siviglia relates to forming a corneal refractive therapeutic lens as now defined in Claim 25, and it is believed

that Claim 25 as well as those claims dependent thereon should now be in allowable condition.

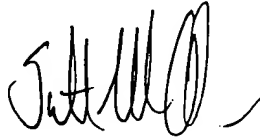
The Examiner also rejected Claim 47 as being anticipated by Woodford. The Examiner states that Woodford discloses a contact lens having a central zone, a connecting zone referred to as the aspheric curve beginning at the periphery of the optical zone and continuing to a flatter portion, column 4, lines 16-18. The Examiner further states that Woodford teaches a connecting zone having a shape defined as a sigmoidal curve with reference to the working surface 66 of tool 60 having an S-shape, column 4, lines 64-68 and Figs. 4A-4F. The Examiner further attributes Woodford as having a peripheral zone referenced as the flatter portion of the aspheric curve near the edge of the lens, corresponding to the bevel labeled 16 in Fig. 1, in which only the posterior surface is beveled. The Examiner goes on to state that the central zone and the peripheral zones of Woodford are designed independently from one another, with reference to column 4, lines 56 – 63 and column 5, lines 36-38. With reference to this rejection, Claim 47 as now amended clearly distinguishes from the prior art of Woodford, and favorable action thereon is requested. More particularly, the invention as defined in Claim 47 refers to a corneal refractive therapeutic contact lens having a central, connecting and at least one peripheral zone as defined, wherein the connecting zone is designed so as to match the slopes of the central and at least one peripheral zone as described. Further, the shapes of the central and at least one peripheral zone are chosen to redistribute corneal tissue in a desired manner, which the prior art of Woodford does not relate to in any manner. The prior art of Woodford is directed to a standard corrective contact lens which is worn by a user to correct refractive errors as with eye glasses. Woodford directs the lens design to improving comfort to the wearer, by producing a bevel at the lens periphery. Nothing within Woodford relates to redistribution of corneal tissue by the lens design as called for in Claim 47, and the teachings of Woodford would not have made the present invention as now defined obvious, either alone or in conjunction with other cited prior art. It is therefore believed that Claim 47 should be in allowable form.

The Examiner also rejected Claims 47-50 under 35 USC §102(b) as being anticipated by El Hage. In this regard, the Examiner states that El Hage discloses a contact lens having the characteristics of Claim 47 as previously presented. With respect to the central and at least one peripheral zone being designed independently from one another, the Examiner refers to column 7, lines 40-45 and column 8, lines 1-6 of El Hage as teaching this aspect of the claimed invention. In

this regard, these portion so of El Hage as referred to by the Examiner relate to the curvature of the anchor zone 14 and thereafter machining to provide a continuous curvature from the annular anchor zone 14 through the second release zone 16 to the raised periphery 18 of the mold. This portion of El Hage does not refer in any way to a design of a lens wherein a central and at least one peripheral zone are independently designed and connected by a connecting zone shaped to match the slopes of the central and peripheral zones as claimed. The Examiner has arbitrarily selected portions of the lens design as schematically shown in the figures, as corresponding to these zones in the present invention, without any suggestion or underlying description by El Hage. The random selection of a connecting zone 1 mm to the sides of the points 12 and 14 in the figures of El Hage, does not relate to the El Hage design, and is merely an attempt to force some correlation of the El Hage design onto the lens according to the present invention. Nothing within El Hage relates to forming a central zone having predetermined characteristics, and at least one peripheral zone, having a predetermined, independent characteristics, wherein the zones are connected by a zone which is able to be matched to the slope of the corresponding central and peripheral zones as in the present invention. Even if the Examiner's arbitrary selection of zones in the lens design of El Hage were to be accepted, nothing in El Hage relates to matching of slopes to the central and at least one peripheral zones, and the Examiner's suggestion that El Hage shows such a feature is simply not based upon any supporting evidence within El Hage. As clearly stated by El Hage with reference to the figures, the figures are diagrammatic, and dimensions are greatly exaggerated as stated in column 4, lines 48-54. The reliance upon Fig. 5B in an attempt to find correlating features to the present invention, is only based upon the disclosure of the present invention itself, and nothing within El Hage relates thereto. The invention as defined in Claim 47 clearly distinguishes from El Hage, which has no correlating structures or design as set forth in the present invention.

The indication of allowable subject matter is gratefully acknowledged by the applicant, and it is believed that these claims in conjunction with those claims previously rejected are now in condition for allowance. It is therefore believed that favorable action is in order, and the same is respectfully requested.

Respectfully submitted,
Hahn Loeser + Parks, LLP

A handwritten signature in black ink, appearing to read 'S. Oldham', with a stylized flourish at the end.

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